

## 510(k) Summary

Prepared: December 9, 2005

Submitter:

Company Name: Canon USA, Inc. (U.S. agent for Canon Inc.)  
Company Address: One Canon Plaza  
Lake Success, NY 11042  
Contact Person: Ms. Sheila Driscoll  
Phone Number: (516) 328-5602  
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Proposed Device:

Reason For 510(k): New Model  
Manufacturer: Canon Inc.  
Trade Name: Canon  
Model Name: CXDI-50C  
Classification Name: MQB, Solid State X-ray Imager  
FDA 510(k) #: To be assigned

Predicate Device:

Manufacturer: Canon Inc.  
Trade Name: Canon  
Model Name: CXDI-50G  
Classification Name: 90MQB, Solid State X-ray Imager  
FDA 510(k) #: K031447

Manufacturer: Canon Inc.  
Trade Name: Canon  
Model Name: CXDI-40C  
Classification Name: 90MQB, Solid State X-ray Imager  
FDA 510(k) #: K031633

Description Of Device: The Canon digital radiography CXDI-50C is used to directly capture and convert conventional projection X-ray images to digital images. A sub-sampled image can be displayed on a preview monitor for viewing. The diagnostic image can be transmitted through a DICOM compatible digital network for printing. The device provides digital image capture for conventional film/screen radiographic examinations.

The Canon digital radiography CXDI-50C is different from CXDI-50G and CXDI-40C in the following respect:

- The CXDI-50C is a portable unit as same as the CXDI-50G. It is positioned on a table or installed in a holder for a stand or a table during its operation as is the case with a film cassette, while the CXDI-40C operates in conjunction with an upright stand, table, and universal stand.
- Both the CXDI-50C and the CXDI-50G use the same amorphous silicon alloy as the sensing means, however, the

#### *Section 10: Summary*

CXDI-50C uses the different material for fluorescent screen which is deposited on the amorphous silicon array with from the CXDI-50G. The CXDI-50C uses CsI (Cesium Iodide) while CXDI-50G uses GOS (Gadolinium Oxy-Sulfide). Because of CsI which provides high x-ray absorption as fluorescent screen, CXDI-50C delivers diagnostic images with the x-ray dosage less than that required by CXDI-50G and CXDI-50C's DQE approximately doubles compared to CXDI-50G.

The principle of the CXDI-50C is the same as the CXDI-40C, with some modifications of its housing in size and shape. The sensor of the CXDI-50C has the same characteristics as the CXDI-40C and the imaging area is changed from 43x43cm to 35x43cm.

The CXDI-50C itself is a component without a control PC. Using a general-purpose computer with appropriate specifications and the designated system software installed in it, as a control PC, the CXDI-50C achieves performance stated herein (such as image capturing, DICOM transfer and etc.)



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Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

Canon, Inc.  
% Mr. Morten S. Christensen  
Program Reviewer  
Underwriters Laboratories, Inc.  
12 Laboratory Drive, P.O. Box 13995  
Research Triangle Park, NC 27709-3995

Re: K060433  
Trade/Device Name: CXDI-50C  
Regulation Number: 21 CFR 892.1630  
Regulation Name: Electrostatic x-ray  
imaging system  
Regulatory Class: II  
Product Code: MQB  
Dated: February 8, 2006  
Received: February 21, 2006

Dear Mr. Christensen:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (Premarket Approval), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at one of the following numbers, based on the regulation number at the top of this letter:

21 CFR 876.xxxx	(Gastroenterology/Renal/Urology)	240-276-0115
21 CFR 884.xxxx	(Obstetrics/Gynecology)	240-276-0115
21 CFR 892.xxxx	(Radiology)	240-276-0120
Other		240-276-0100

Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <http://www.fda.gov/cdrh/industry/support/index.html>.

Sincerely yours,



Nancy C. Brogdon  
Director, Division of Reproductive,  
Abdominal, and Radiological Devices  
Office of Device Evaluation  
Center for Devices and Radiological Health

Enclosure

## Indications for Use

510(k) Number (if known): K060433

Device Name: CXDI-50C

### Indications For Use:

DIGITAL RADIOGRAPHY CXDI-50C provides digital image capture for conventional film/screen radiographic examinations. The device is intended to replace radiographic film/screen systems in all general purpose diagnostic procedures. This device is not intended for mammography applications.

Prescription Use X  
(Part 21 CFR 801 Subpart D)

AND/OR

Over-The-Counter Use \_\_\_\_\_  
(21 CFR 801 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)

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Concurrence of CDRH, Office of Device Evaluation (ODE)

*Nancy Brogan*  
(Division Sign-Off)  
Division of Reproductive, Abdominal,  
and Radiological Devices  
510(k) Number K060433

Page 1 of 1